

XML Topic Maps & XTM Navigator

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Charting the Course

- Topic Maps Introduction
- XML Topic Maps (XTM)
- XTM Navigator



What is a Topic Map?

“A collection of topics and their semantic relationships”.

The “TAO” of Topic Maps¹



- Topics
- Associations
- Occurrences

1 Steve Pepper, “The TAO of Topic Maps, finding the Way in the Age of XML”, <http://www.gca.org/papers/xmleurope2000/papers/s11-01.html>



What is a Topic?

Any “thing” whatsoever

Examples:

- The Statue of Liberty
- William Shakespeare
- Dante's Inferno



What is a Topic Type?

A category of topics.

Examples:

- Mexico and Bolivia are *instances of* “country”
- Macbeth and Othello are *instances of* “play”



What is an Association?

A semantic relationship between two topics.

Examples:

- Dante **wrote** The Inferno
- Ferdinando Fontana **was born in** Milano, Italy



Associations are Multi-Directional.

Dante **wrote** The Inferno  The Inferno **was written by**
Dante

Bob **opened** the door  The door **was opened by** Bob



What is an Occurrence?

A link to a related information resource.

Occurrence examples for topic “Bolivia”:

- Map of South America
- Bolivian soccer photo
- See page 34.

What are XMLTopic Maps?



They are Topic Maps...

XML style!



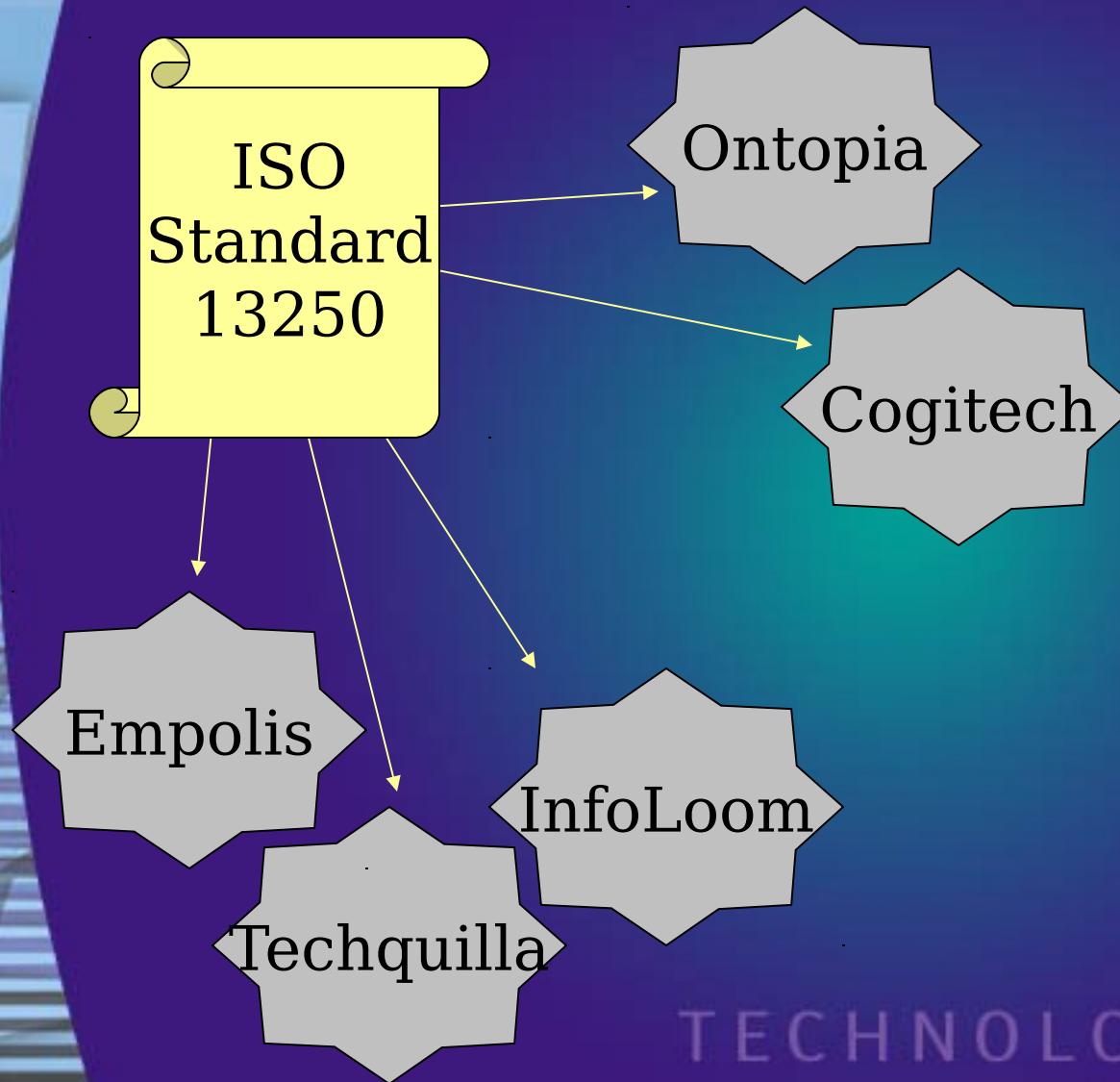
Based on ISO Standard

- ISO/IEC CD CD 13250

<http://www.ornl.gov/sgml/wg8/document/1937.htm>

- Does *not* define an XML DTD.

Initial XTM DTD Implementations

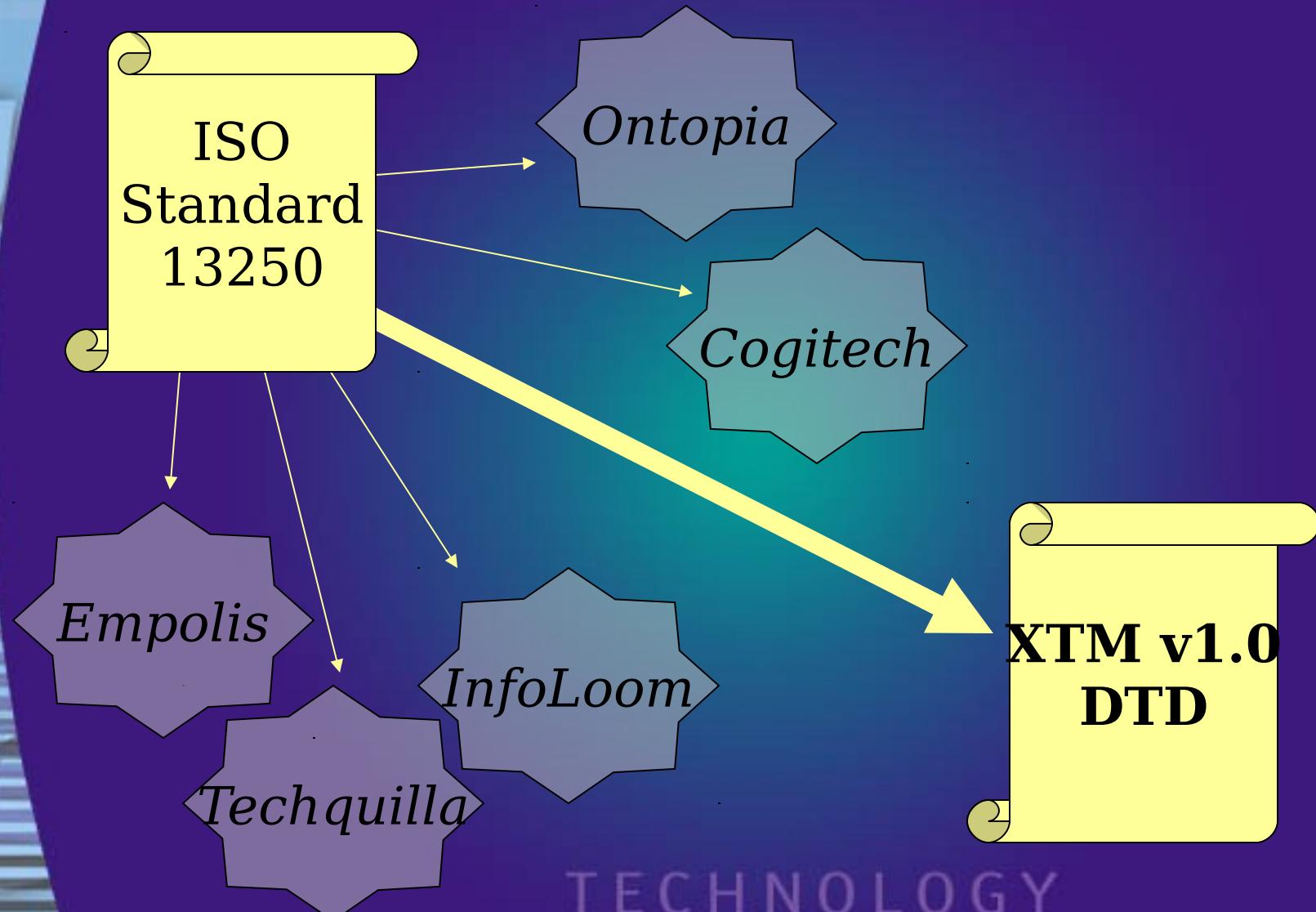




XTM v1.0 Specification

- Standardized by XTM Authoring Group
<http://www.topicmaps.org/xtm/1.0/>
- November 2000
- Supersedes prior DTDs:
 - Cogitech, Empolis, InfoLoom, Ontopia, Techquilla

XML Authoring Group Standard



TECHNOLOGY

WITH A PURPOSE



XTM Navigator v1.0

TECHNOLOGY
WITH A PURPOSE

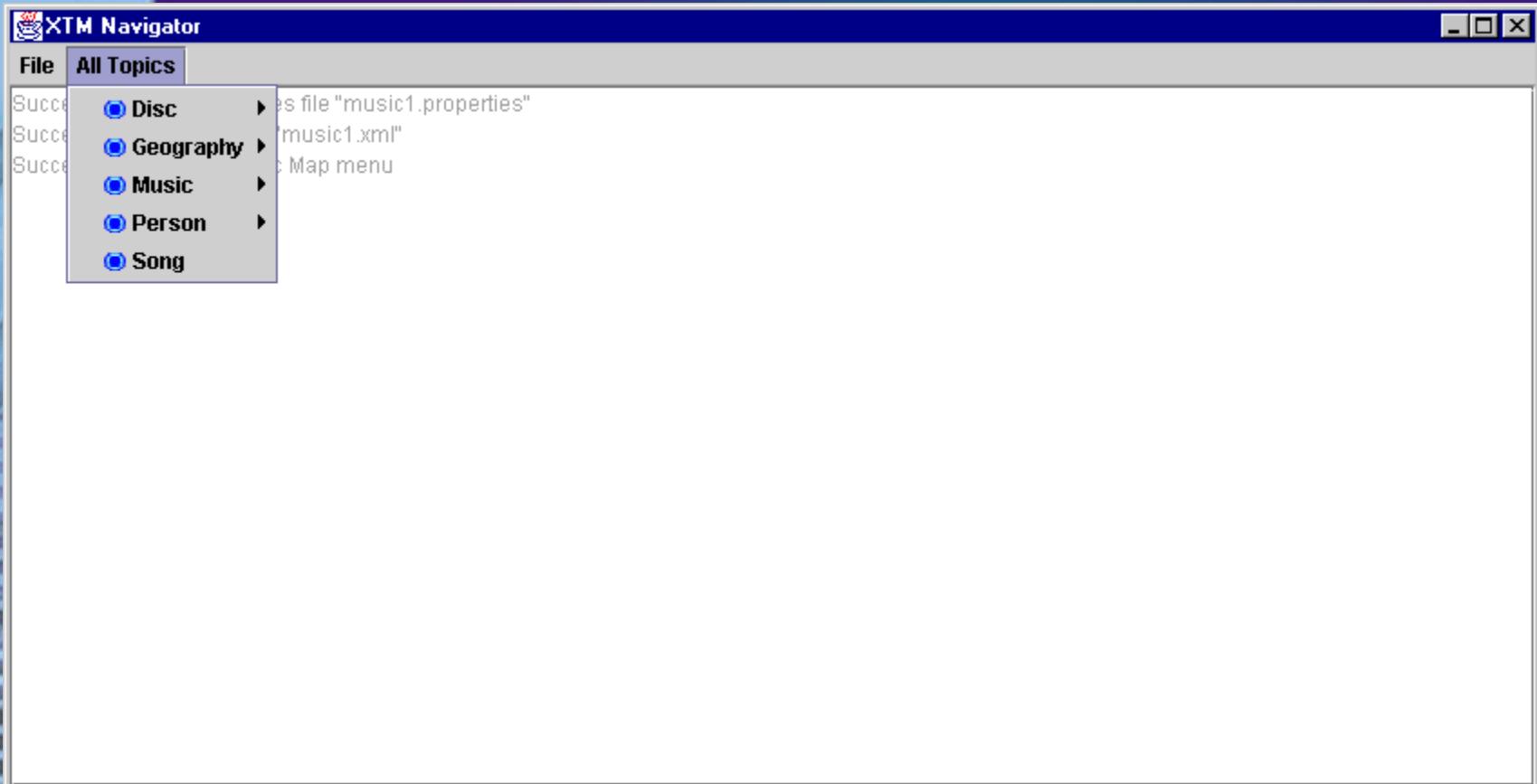


XTM Navigator

- Graphically navigates XTM files.
- Documented API
- Configurable with Properties File
 - Top level topics
 - Short, Medium, Long names
 - “Scoping”



Top Level Topic Types





Topic Instances

XTM Navigator

File All Topics

Succes Disc

Succes Geography

Succes Music

Succes Person

Succes Song

instances of Person

- Ansel Collins
- Artist
- Aston "Family Man" Barrett
- Carlton Barrett
- Joe Strummer
- Junior Murvin
- Lee 'Scratch' Perry
- Mick Jones
- Nicky Headon
- Paul Simonon
- Tory Crimes
- Winston Wright



Associations

XTM Navigator

All Topics

File All Topics

- Success (1) Disc (1) → uses file "music1.properties"
- Success (1) Geography (1) → "music1.xml"
- Success (1) Music (1) → Map menu
- Success (1) Person (1) → instances of Person
 - Ansel Collins (1)
 - Artist (1)
 - Aston "Family Man" Barrett (1)
 - Carlton Barrett (1)
 - Joe Strummer (1)
 - Junior Murvin (1)
 - Lee 'Scratch' Perry (1)
 - Mick Jones (1)
 - Nicky Headon (1)
- Success (1) Song (1)

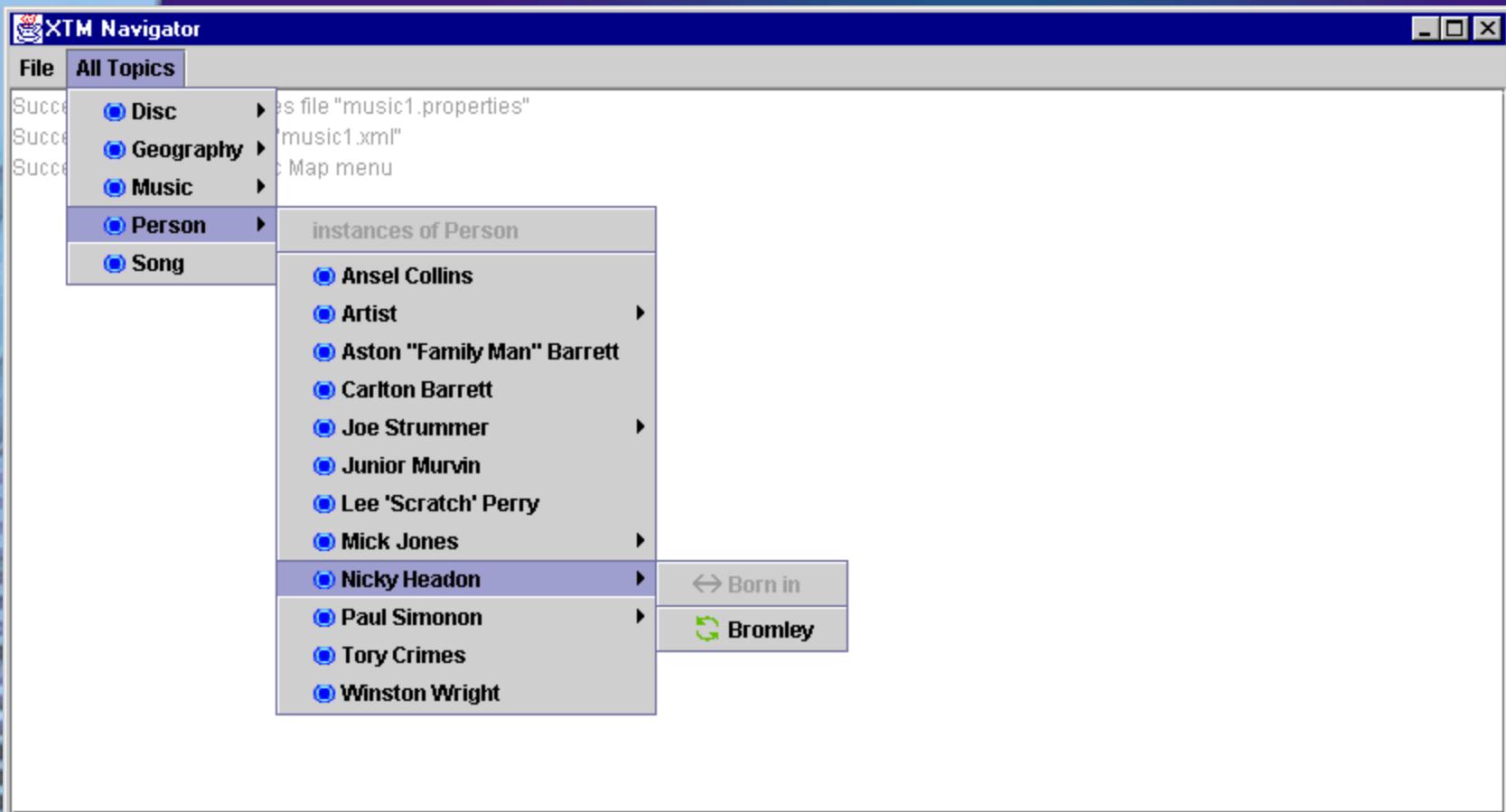
↔ Born in

Paul Simonon (1)

Tory Crimes (1)

Winston Wright (1)

Bromley (1)





Different Icons

XTM Navigator

File All Topics

Succes Disc

Succes Geography

Succes Music

Succes Person

Succes Song

(Topic) 

instances of Person

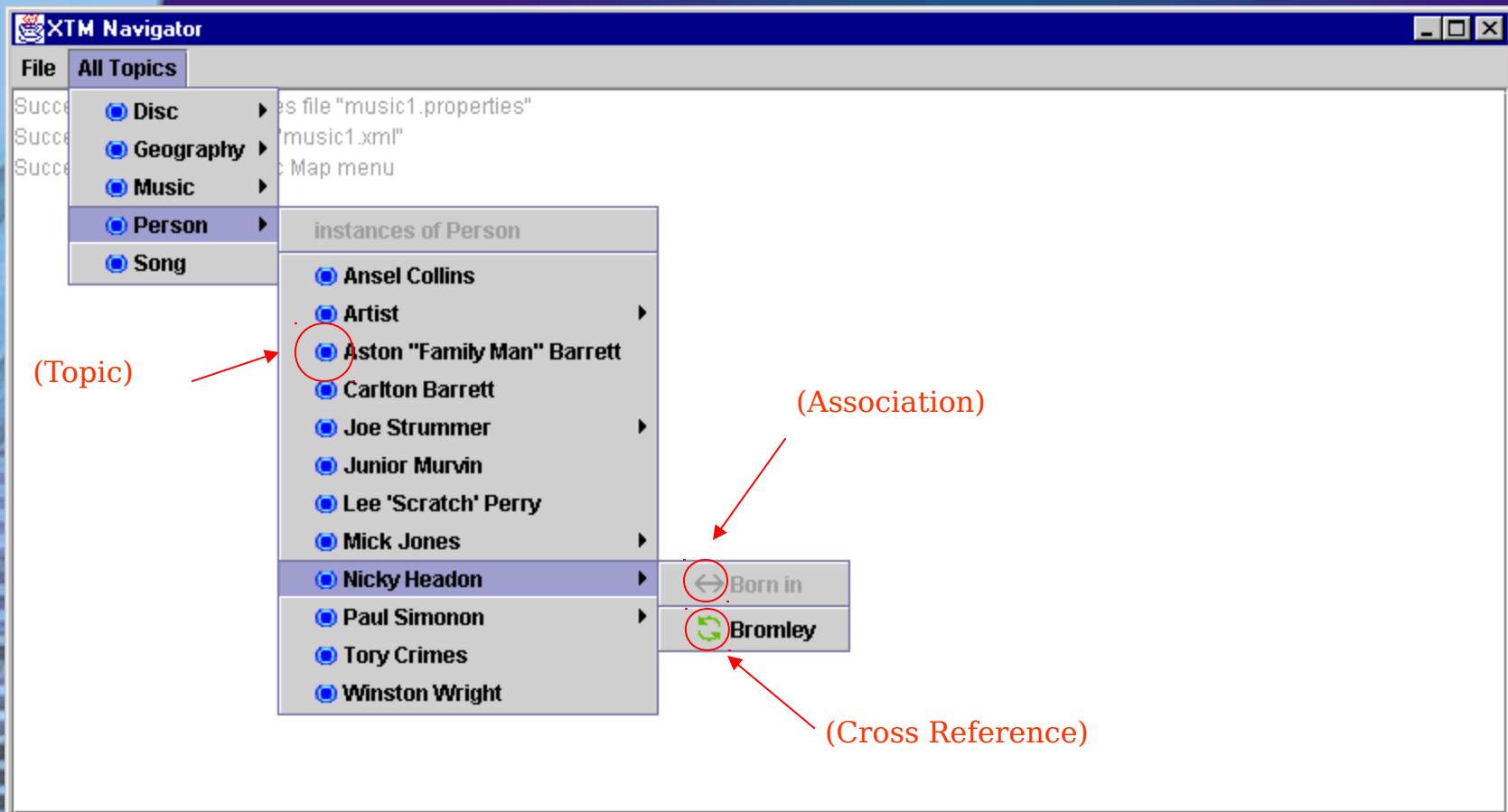
- Ansel Collins
- Artist
- Aston "Family Man" Barrett** 
- Carlton Barrett
- Joe Strummer
- Junior Murvin
- Lee 'Scratch' Perry
- Mick Jones
- Nicky Headon
- Paul Simonon
- Tory Crimes
- Winston Wright

(Association) 

 Born in

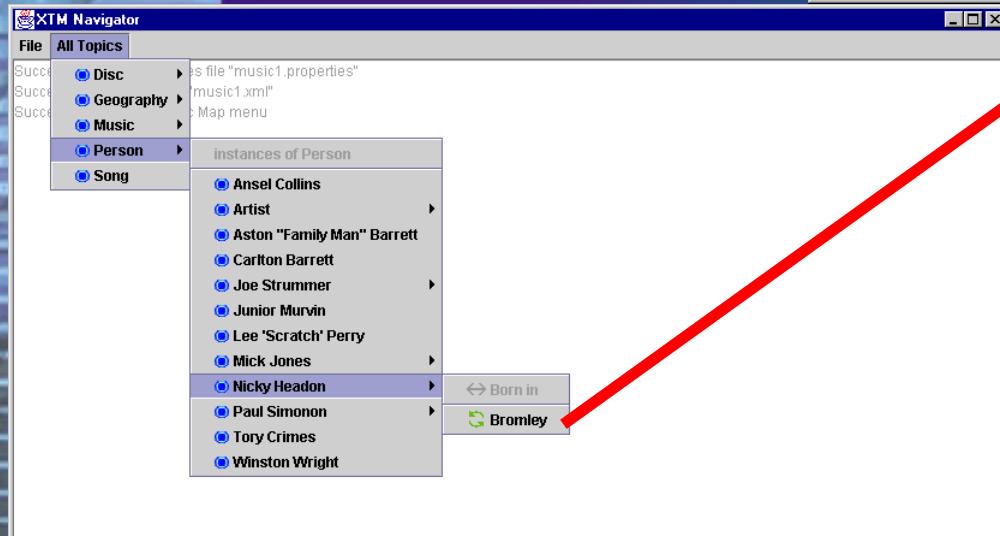
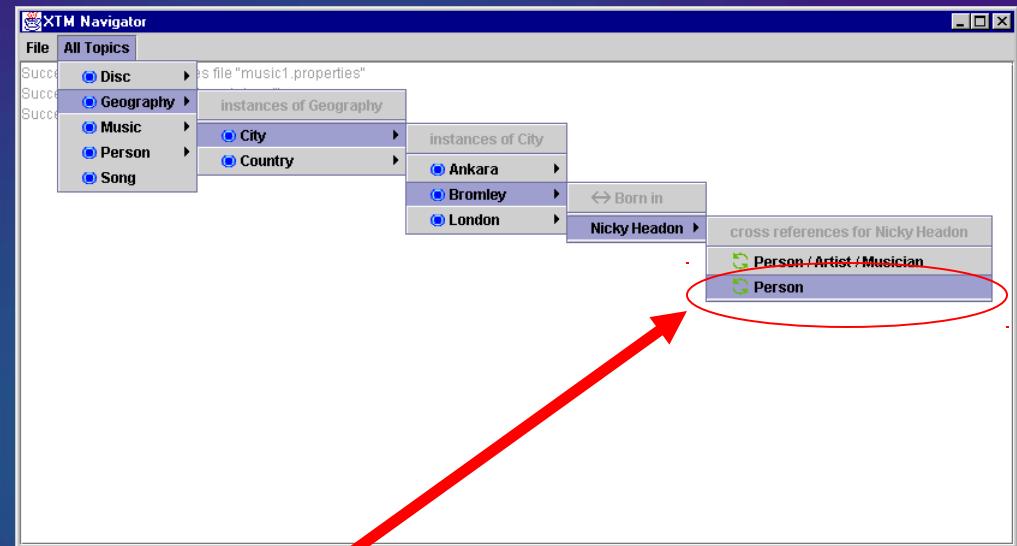
 Bromley

(Cross Reference) 





Cross References



XTM Navigator will
jump to cross
reference when
“Bromley” is clicked.



Topic Selection

Selecting “Belize”
from the Country
Topic Map.





XTM Navigator Demo

TECHNOLOGY
WITH A PURPOSE

Questions?



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